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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/656,118

09/08/2003

Akihito Mori

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EXAMINER

DICKER, DENNIS T

ART UNIT	PAPER NUMBER
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2609

MAIL DATE	DELIVERY MODE
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07/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/656,118

Applicant(s)

MORI ET AL.

Examiner

Dennis Dicker

Art Unit

2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/8/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) --
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1- 4, 9, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa et al. (hereinafter "Furukawa" US 2001/0046065) in view of Rourke et al. (hereinafter "Rourke" US 5,309,558).

With respect to Claim 1 (apparatus) and 11(method), Furukawa teaches a printing process employing a plurality of printing devices [see Abstract and Figure 1]. Furukawa then teaches a printing control apparatus in which a printing attribute acquisition means exist for acquiring an attribute of a printing job to be processed and an adaptive environment determination means for obtaining device combinations capable of executing the printing job based on performance information representing at least performance of each of the plurality of printing devices and the acquired of printing devices and the acquired attribute of the print job [0096].

Furukawa does not teach a process flow presentation means for presenting process procedures.

Rourke teaches a process flow presentation means for presentation process procedures of the printing process by a combination actually used to execute the printing job out of the device combinations [See Column 5 Line 64 to Column 5 Line 3].

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use the feature of presenting process procedures in a printing control apparatus that employs a plurality of printing apparatuses to enhance the presentation means.

With respect to Claim 2, Furukawa teaches a printing control apparatus which performs printing process employing a plurality of printing devices [See Abstract and Figure 1]. Furukawa then teaches a printing control apparatus in which a printing attribute acquisition means exist for acquiring an attribute of a printing job to be processed and an adaptive environment determination means for obtaining device combinations capable of executing the printing job based on performance information representing at least performance of each of the plurality of printing devices and the acquired of printing devices and the acquired attribute of the print job [0096]. Furukawa also teaches an apparatus wherein when a plurality of device combinations exist the adaptive environment determination means determines an order of device combinations under a condition designated in advance and presents the device combinations in that order [See 0097].

With respect to Claim 3, Furukawa teaches a printing control apparatus which performs printing process employing a plurality of printing devices [Abstract and Figure 1]. Furukawa also teaches a printing control apparatus in which a printing attribute acquisition means exist for acquiring an attribute of a printing job to be processed and an adaptive environment determination means for obtaining device combinations capable of executing the printing job based on performance information representing at

least performance of each of the plurality of printing devices and the acquired of printing devices and the acquired attribute of the print job [0096]. Furukawa also teaches an apparatus wherein when a plurality of device combinations exist the adaptive environment determination means determines an order of device combinations under a condition designated in advance and presents the device combinations in that order [0097]. Furukawa also teaches an apparatus where the performance information includes pieces of information on a printing speed and device location and determines the order under a condition including such as printing speed and device installation place [Figure 2].

Furukawa does not teach an apparatus wherein the performance information includes cost.

Though not explicitly taught it would have been obvious to one of ordinary skill in the art at the time of invention to display cost information along with printing speed information as both pieces save the consumer money and time respectfully.

With respect to Claim 4 (apparatus), 9(apparatus) and 13(method), Furukawa teaches a printing control process employing a plurality of printing devices [Abstract and Figure 1]. Furukawa also teaches a printing control apparatus in which a printing attribute acquisition means exist for acquiring an attribute of a printing job to be processed and an adaptive environment determination means for obtaining device combinations capable of executing the printing job based on performance information representing at least performance of each of the plurality of printing devices and the acquired of printing devices and the acquired attribute of the print job [0096]. Furukawa

further teaches an apparatus that comprises state acquisition means for acquiring a process state of a device included in the device combination such as a printing device [0013] and a presentation means which present a current process status [Figure 2] on the basis of the acquired process state [0058].

3. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa (US 2001/0046065) in view of Rourke (US 5,309,558) and further in view of Tonkin (US 6,134,568).

With respect to Claim 5 and 10 Furukawa teaches which performs printing process employing a plurality of printing devices [Abstract and Figure 1]. Furukawa also teaches a printing control apparatus in which a printing attribute acquisition means exist for acquiring an attribute of a printing job to be processed and an adaptive environment determination means for obtaining device combinations capable of executing the printing job based on performance information representing at least performance of each of the plurality of printing devices and the acquired of printing devices and the acquired attribute of the print job [0096]. Furukawa further teaches an apparatus that comprises state acquisition means for acquiring a process state of a printing device [0013] and a presentation means which present a current process status [Figure 2] on the basis of the acquired process state [0058].

Rourke teaches a process flow a presentation means for presentation process procedure of the printing process by a combination actually used to execute the printing job out of the device combinations [Column 5 Line 64 to Column 5 Line 3].

Furukawa does not teach a process flow presentation means for presenting process procedures, where the procedure that is in progress or to be performed next is displayed to present the current process.

Tonkin teaches a process flow presentation means wherein the presentation means emphatically presents a procedure, which is to be performed next [Figure 5F].

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to include this feature in the printing control apparatus to enhance the presentation means by emphatically displaying the procedure that is in progress to give improved notification to the user of the printing procedure process.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa (US 2001/0046065) in view of Rourke (US 5,309,558) and further in view of Ip et al. (US 5,550,997).

With respect to Claim 6, Furukawa teaches a printing process apparatus employing a plurality of printing devices [Abstract and Figure 1]. Furukawa also teaches a printing control apparatus in which a printing attribute acquisition means exist for acquiring an attribute of a printing job to be processed and an adaptive environment determination means for obtaining device combinations capable of executing the printing job based on performance information representing at least performance of each of the plurality of printing devices and the acquired of printing devices and the acquired attribute of the print job [0096].

Rourke further teaches a process flow a presentation means for presentation process procedure of the printing process by a combination actually used to execute the printing job out of the device combinations [Column 5 Line 64 to Column 5 Line 3].

Furukawa does not teach a presented procedure, which includes a message that prompts checking an expandable use by the printing device.

In et al. teaches a presented process procedure which include a message which prompts checking an expandable use by the printing device [Column 35 Lines 14-19]

Therefore it would have been obvious to someone of ordinary skill in the art at the time of invention to modify the apparatus taught by Furukawa with the addition of the presentation means by Rourke and the feature taught by Ip et al. as this feature will enhance the printing control apparatus.

5. Claim 7, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa (US 2001/0046065) in view of Rourke (US 5,309,558) and further in view of MIMI et al (hereinafter "MIMI" 2002/0101604).

With respect to Claim 7 (apparatus) and 12(method), Furukawa discloses a printing control process employing a plurality of printing devices [Abstract and Figure 1]. Furukawa also teaches a printing control apparatus in which a printing attribute acquisition means exist for acquiring an attribute of a printing job to be processed and an adaptive environment determination means for obtaining device combinations capable of executing the printing job based on performance information representing at

least performance of each of the plurality of printing devices and the acquired of printing devices and the acquired attribute of the print job [0096].

Rourke teaches a process flow a presentation means for presentation process procedure of the printing process by a combination actually used to execute the printing job out of the device combinations [Column 5 Line 64 to Column 5 Line 3].

Furukawa does not teach an apparatus, which comprise a display means for displaying device combinations capable of executing the printing job.

MIMI teaches an apparatus that further comprises a display means for displaying device combinations [Figure 5] capable of executing the printing job as to be able to select one of the combinations. [0049-0050].

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to display the printer combinations to achieve a print job where this feature will enhance the control process and will also give improved notification of which printers are being used.

With respect to Claim 14 and 15, Furukawa teaches a printing process employing a plurality of printing devices [Abstract and Figure 1]. Furukawa also teaches a printing control apparatus in which a printing attribute acquisition means exist for acquiring an attribute of a printing job to be processed and an adaptive environment determination means for obtaining device combinations capable of executing the printing job based on performance information representing at least performance of each of the plurality of printing devices and the acquired of printing devices and the acquired attribute of the print job [0096].

Rourke further teaches a process flow a presentation means for presentation process procedure of the printing process by a combination actually used to execute the printing job out of the device combinations [Column 5 Line 64 to Column 5 Line 3].

Mimi teaches a computer readable medium and program product [0029] comprising the modifications taught by Rourke and Furukawa.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to store such code in an executable form on an executable storage medium to achieve such a task of a printing control apparatus and method.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa et al. (hereinafter "Furukawa" US 2001/0046065) in view of Rourke et al. (hereinafter "Rourke" US 5,309,558) and further in view of Sorimachi (US 5,331,442).

With respect to Claim 8, Furukawa teaches a printing control apparatus which performs printing process employing a plurality of printing devices [Abstract and Figure 1]. Furukawa also teaches a printing control apparatus in which a printing attribute acquisition means exist for acquiring an attribute of a printing job to be processed and an adaptive environment determination means for obtaining device combinations capable of executing the printing job based on performance information representing at least performance of each of the plurality of printing devices and the acquired of printing devices and the acquired attribute of the print job [0096].

Rourke teaches a process flow a presentation means for presentation process procedure of the printing process by a combination actually used to execute the printing job out of the device combinations [Column 5 Line 64 to Column 5 Line 3].

Furukawa does not teach a process flow presentation means for presenting process procedures, and an apparatus when the attribute of the printing job contains color printing said adaptive environment determination means detects monochrome and color pages contained in the printing job, and determines a combination so as to print the monochrome page by a monochrome printing device.

Sorimachi teaches an apparatus when the attribute of the printing job contains color printing said adaptive environment determination means detects monochrome and color pages contained in the printing job, and determines a combination so as to print the monochrome page by a monochrome printing device [Column 1 Lines 48-56].

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to employ the feature of dividing color and monochrome pages to save ink and time when printing multiple jobs in a fast paced environment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Dicker whose telephone number is (571) 270-3140. The examiner can normally be reached on Monday - Friday 7:30 A.M. to 4:00 P.M..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on (571) 272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alexander Eisen
SPE
Art Unit 2609

DD
7/5/2007